THE VETERINARY RECORD

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Professional Conduct.

Our correspondence columns this week contain various complaints against members for conduct disapproved of by the writers. We have said before, and we must repeat that the proper place to lodge complaints is 10, Red Lion Square. The Registration Committee appointed by the Council has power to deal with all matters affecting the discipline of the profession. If a complaint is well founded the committee may be depended upon to do justice, but it is not fair to waste the time of the committee by making frivolous charges against rivals, and it is useless to send information of so vague a nature than no offence can be established. Breaches of professional etiquette may be so gross as to warrant complaint to the Council but, as a rule, these questions are outside of the sphere at present embraced by the Council's action.

A great deal must be left to the individual sense of good taste and common decency. These feelings are not possessed by all in equal degree, some of us are too squeamish, some, perhaps, too pachydermatous. A gentleman who has made a great discovery in medicine, surgery or hygiene is commended by his profession when he discloses his new found method. A practitioner who declares he has made a great discovery cannot be contradicted, and he cannot be forced to share it with his neighbours. When the discoverer makes his statement in a professional journal but gives no details his colleagues cannot be blamed for a little scepticism. When he relates to a mixed audience—some being his own clients and some those of other practitioners—how he had worked for years at pathological problems and now has solved two or three, scepticism is rightly accompanied by more positive feelings, and the names of Holloway, Elliman, Harvey and Co. at once rise to the mind.

The giving of testimonials to proprietors of secret remedies which cure all sorts of diseases is quite incapable of defence. A correspondent sends us three which we shall forward to the Registration Committee. Our object in publishing them before doing so is to enable any reader possessed of information to send it to the Secretary. "J. Vincent Browne, Esq., M.R.C.V.S., F.V.M.C.A." is not a name we can find on the Register for 1896. He writes from Natal under date "Feb. 1893." "Frederick Adsetts, Esq., M.R.C.V.S., F.V.M.C.A." we regret to say is on the Register, and we trust it may be found that the use of his name is against his wish and without his permission. "Thomas Baty, Esq., M.R.C.V.S., L. & G." is not to be found in the Register for 1896. The stuff that these gentlemen think is not derogatory to their position to support, has not yet become so famous as to have previously come under our notice. Two of the three professional testimonial-givers use words suggesting their knowledge of the ingredients of the stuff. One certifies it to be "free from any deleterious or noxious matter," the other states that "the ingredients are of the best and purest kind, seldom to be found in preparations designed for the treatment of domesticated animals" How J. Vincent Browne, Esq. dares to make this assertion we cannot understand, unless he has assisted in the manufacture. His last statement is a gratuitous libel upon the veterinary profession, and wholesale druggists could tell him that the purest and most expensive drugs are largely employed in veterinary practice—sometimes we fancy too lavishly.

Messrs. Browne, Adsetts and Baty if they are all really veterinary surgeons, should be invited to offer some explanation of the testimonials to which their names are attached.

One more complaint we must notice if only to dispel the fear of "Another Poor Graduate." The syllabus of lectures of the Dundee and District Coachman's Club has not aroused us "to a lively sense of the danger of the situation." Lectures on animals or on their diseases may be good or bad. They may deceive the persons who listen to them into a belief that they understand animals and are capable of treating disease. On the contrary a series of lectures may enable the hearers to appreciate the fact that an animal is a much more complex piece of mechanism than a watch, and that when it is disordered the safest proceeding is to employ a man specially trained to put it right. We see no danger to any calling in the delivery of technical lectures. Some of these lectures can only be given by a veterinary surgeon, and if carefully thought out and well delivered can only do good to the profession and to the man whose duty it is to look after animals in health. It is hopeless to oppose "the tendency of the spirit of the times in which we live." The best plan is to recognise it, to move with it, and to direct it as much as we can. Secondary and technical education are inevitably on the increase in Britain. Properly directed they are the most trustworthy antagonists of ignorance, quackery, and fraud.

CASES AND ARTICLES.

MASTICATORY PARALYSIS.

By W. Pauer, M.R.C.V.S., Blackwater.

A Gordon setter, two years old, was brought to my infirmary on July 25th last, his lower jaw being dropped and his tongue out, with large quantities of frothy saliva hanging from the mouth. He seemed in excellent spirits, and with the exception of the above described there seemed to be nothing amiss with him.

As I was very suspicious of rabies I questioned his owner as to his previous history, which was as follows: He had on the preceding day travelled from the north, there he had been broken by the gamekeeper, with whom he had always lived and to whose knowledge he had never been bitten. The present condition of the jaw had appeared suddenly two days previous to his departure.

After examining the interior of the mouth, I placed him in one of my kennels under close observation. His appetite was excellent, in fact almost insatiable, he was also very thirsty but was only able to swallow a very small quantity though he dipped almost his whole face into the drinking trough. He could not retract his tongue, and the lower jaw would immediately drop after having been pressed into position by the hand. When food was dropped at the back of the mouth he gulped it down as there was no possibility of his masticating it.

My suspicions of rabies vanished after he had been here 3 or 4 days; his condition remained the same and no further symptoms developed. I gave him five minims of liq. strych. (1 in 100) twice daily in a little water and continued the administration of this medicine daily during his stay here. I also blistered the masseter and temporal muscles with cantharides ointment (1 in 6). Improvement did not appear to take place, so that on August 1st, and daily afterwards for 10 minutes, I applied a medium strength secondary induced electric current: the negative pole was placed in contact with the skin (previously moistened) over the muscles of mastication, which were massaged with one hand while the positive electrode was held with the other. After a few days of this treatment the dog progressed towards recovery slowly but surely.

On August 10th I blistered him again and two days afterwards I sent him home. The strychnine medicine was continued for some days afterwards.

On August 20th he had completely recovered and within a week was being shot over on the moors.

[These are interesting cases and somewhat anxious ones from their resemblance to "dumb rabies." As a rule there is atrophy of the temporal muscles and usually some history of accident or injury. Great assistance is given the dog by slipping a thin india-rubber ring over the nose and lower jaw when food or water is offered. He can then swallow more easily—of course the elastic band must not be left on long.—Ed.]

MOTOR CARS AND VETERINARY EDUCATION.

By G. Upton, M.R.C.V.S., Dartford.

With the advent of motor cars the question of veterinary education in the future ought to receive grave consideration. What class of veterinary surgeon will in a few years be required? Speaking generally the cattle veterinary surgeon or what was known formerly as the cow leech, thereby distinguishing the farrier and the cattle doctor. There certainly is no getting away from the fact that horse labour will be diminished, consequently veterinary surgeons must turn their attention more to diseases of animals other than the horse; some perhaps will say horses will increase more than ever with motor cars. I well recollect what the ordinary agricultural labourer said when the combined corn reaper and binder was first started—that the machine would never answer; but it has and driven them from the country into the large towns to seek employment. *Vice versa*, this will apply to veterinary surgeons, they will have to leave the towns to seek employment in the country. The thing appears to me in reading *The Veterinary Record* that our system of teaching students is simply to produce a horse surgeon and not a cattle surgeon, and up to the present it has answered, considering the amount of money derived from horse practice. I think it was the late Professor Robertson who said in one of his clinical lectures that a man to earn a living in towns should be well up in lameness; to earn a living in the country he must be a good castrator and obstetric surgeon. Not that I have anything to say against the teaching or teachers at Camden Town, far from that, but how can a man in London become cognisant of the ways of animals in health, of the details of breeding, rearing etc.

If I am repeating some remarks previously made please pardon me, nevertheless I consider the four years scheme increased by a summer session is a great mistake. The summer session was very well under a three year's course because men before entering College had mostly served a pupilage; now, to lessen expense, pupilage is done away with, and properly so. Before entering a profession a man ought to thoroughly consider the question of the 'game and the candle.

Who was the originator of this summer session and extra expense to veterinary students? I don't know. The veterinary surgeons I am acquainted with are dead against it; the only people to benefit by it seem to be the landladies near Camden Town. If students had the advantage of the summer session in the country they ought to learn something about the habits of animals in health and acquire what, in my humble opinion, is very important in our profession—the art of handling clients. It always has seemed to me an act of injustice to try and increase the expenses of veterinary education beyond the four years by adopting a summer session, which means at least £50 to £60 addition to students during their educational course. If we have adopted a four years scheme to diminish the output of veterinary surgeons

let us be fair to those veterinary surgeons who have sons to educate for the profession; and the colleges which offer the diploma at the cheapest rate certainly deserve attention.

To meet this motor car difficulty I trust that the diseases of pigs and sheep will be more thoroughly gone into and examined upon, so that come what may veterinary surgeons will be able to gain a livelihood, and let those gentlemen who have naturally a liking for town practice go in for canine surgery, for at no time was the future of the veterinary profession in such a critical condition as now.

VETERINARY SOCIETIES.

LINCOLNSHIRE VETERINARY MEDICAL ASSOCIATION.

A meeting was held at the Albion Hotel, Lincoln, on Thursday, November 12th, 1896. The President (Mr. H. Howse, Lincoln) being absent through illness the chair was taken by Mr. T. A. Rudkin, Grantham, Vice-President; and there were also present Captain Russell, Grantham; Messrs. W. H. Brooks, Leadenham; B. Freer, Uppingham; J. Mackinder and J. A. Robinson, hon. sec., Peterboro'; C. Hartley and C. Seeley, Lincoln; W. G. B. Dickinson, Boston; F. A. Holmes, Hemswell; Jas. Smith, Huntingdon; T. E. Smith, Market Rasen; F. W. Wragg, London; H. Bentley Eve, Caistor; J. E. Porter Smith, Mareham-le-Fen.

The minutes of the last meeting having been taken as read, the Secretary read letters of apology for non-attendance from Dr. Fleming, Professors Pritchard, Penberthy, Williams, and W. O. Williams, and Messrs. Kidd, Weston, Gooch, and E. J. Richardson. The President wrote regretting his inability to take the chair as he was confined to his room by an attack of bronchitis, and wishing the members present a very successful meeting.

On the motion of Captain Russell, seconded by Mr. Wragg, the Secretary was directed to send a letter of condolence to Mr. Howse, regretting his absence and wishing him a speedy restoration to health.

An Honorary Associate.

In accordance with notice given at the last meeting of the Association Captain Russell proposed the election of W. Hunting, Esq., of London, as an Honorary Associate of the Lincolnshire V.M.A., and spoke in highest terms of praise of the services he had rendered both to the Lincolnshire Association and to the profession at large.

Mr. Freer seconded, endorsing the laudatory observations of Captain Russell, and the resolution was carried with acclamation.

AUTO-INTOXICATION IN ANIMALS.

By W. G. B. Dickinson, Esq., F.R.C.V.S., Boston.

Gentlemen,—The subject of my paper is not a new one to us as veterinarians in this country, but it has received greater attention than we have given it by our continental colleagues. I hope to give a rough outline on this subject in a short paper which I trust will be the stepping-stone to further enquiries and lengthy investigations with us as a profession generally. The putrefactive processes in the intestinal tract and the manufacture of poisonous substances play such an important part in disease, and as yet have been so scantily contributed to in veterinary literature that an enquiry into the action of these morbific products is very much called for.

The introduction of poisons from without or generated within the body of animals play a most important part in disease. Death is known to carry off animals in a few hours most unexpectedly where post-mortem examinations absolutely fail to enable us to arrive at the true cause of this sudden collapse. We assign what we suppose to be the cause, probably under the term "syncope," or other conclusions at which we may arrive, when probably no such condition was the cause of the demise, which might be accounted for by the fact that the animal had partaken of food or fluid which produced poisoning and was the factor of death, without as it were being actually chemically or physiologically a poison before it entered into the animal economy.

Many are the continental writers who have demonstrated how *malaise* may depend upon deleterious chemical substances combining with products of the system to form chemical products which are equal to different bases—inorganic and vegetable. The Italian toxicologist Selmi called these ptomaines. These are formed by the action of bacteria upon organic matter. Bourchard confines himself rather to the general action of animal poisons than to a designation of them, and as Professor Thomas Oliver puts it "it is sufficient to state that all ptomaines are not poisonous." We know this, and are grateful for the knowledge that some are quite inert. Nitrogen being present in ptomaines gives a resemblance to vegetable alkaloids, which Brieger rightly calls toxins. Many at the same time are built up with oxygen, whilst in others oxygen is absent. The part bacteria take in the development of ptomaines which are attributable to the virulence of micro-organisms is forcibly shewn in our patients in tetanus. Soil and its condition governing the propagation and perfection of the growth of micro-organisms which accounts for the virulency of infection in tetanus and some other diseases, Temperature without and within the animal economy has much to do with the elaboration of disease germs, some of which require oxygen while others prosper without.

We see the two forms produced by the same poison but under different conditions. The one follows a wound and the other appears as it were without any assignable cause; but we find the morbid products in both victims. The effect of some external conditions is well exemplified by the spread of influenza in mild, damp, foggy weather, and particularly in young horses that are stabled and kept warm after their sojourn in the open air from their birth, the development of influenza poison is manifest, whereas if these colts were left to the tender mercies of outside climate they would remain healthy. After being housed the temperature is favourable to the development of the poisonous organisms already in the system.

We all know that life, human and animal, is spent in building up and breaking down of molecules—Pasteur showed the important part which micro-organisms play in the production of disease; this is shown most distinctly in the intestinal tract. The vitality of our patients depends in a great measure on the metamorphoses which take place during digestion in the smaller intestines—changes chemical, fermentative, and putrefactive—during digestion. The absorption of alkaloids and ptomaines most seriously affect the well-being of the animal.

The antagonism of one specie of organism is protective against the activity of another, thus limiting the life of any particular sect of this order.

Animal life whether the higher or the lower is always in the midst of a multitude of dangers of being cut down by one or other poison within the system. This danger is minimised by the healthy activity of the organs of excretion—the kidneys. The liver scrutinising as it were the portal vein contents as they are sent from the alimentary canal.

The fermentative products in the food of horses causes

many a death which we assign to the so-called colic, and is really due to auto-intoxication, and calls for some urgent application of an intestinal antiseptic. I have been able to overcome this condition by the introduction of beta-naphthol into the stomach by the mouth and the intestine direct. Lauder Brunton says it is poisonous and recommends salicylate of beta-naphthol. Of course all the phenols are antiseptic—more or less, within the intestine.

Our consideration in the study of this subject is perhaps chiefly called for in the conditions presented to us in those patients under our care suffering from intestinal and gastric derangements. Therefore let us briefly summarise the toxic effects of poisons contained in the intestinal tract, originating from putrefactive elements—which are factors in the condition known as azoturia or in another's words "intoxication by all the poisons which are normally introduced into, or found in the organism," which are not eliminated by the kidneys and other organs. In the treatment of this condition we have employed many agents to accomplish the action of the eliminating organs, succeeding in so doing to an extent, but not generally getting quit of the toxicity which exists. We administer purgatives which remove from the blood water with which is a moiety of toxic material, dehydrating the blood and tissues, causing a diminution of the poison but not entirely eradicating it. We employ diuretics to stimulate the kidneys, which are generally active. I find the bromides and nitrates of sodium more beneficial than the potassium salts, the toxic inducing influences of the latter are well-known. The deleterious substances contained in the intestines favour an intoxication which is often seen in gastric and intestinal symptoms in the horse. The poisons which are generated from food in the intestines are many, and all more or less tend to produce intoxication by their accumulation in the blood through the activity of fermentation in the tract of intestines producing marked changes which characterise themselves to us. Tympany for instance is almost constant in impaired gastric and bowel function. The evolution of gas signalises its presence by eructations or the escape of flatus. The odours of expelled gases suggest to us the presence of sulphuretted hydrogen and ammonias which are given off from putrefactive fermentation of substances within. The detection of these gases appears more distinctly after puncturing the abdominal viscera in cases of flatulent colic in the horse, and the urgency of this operation is indicated and warranted to us from the fact, patent to everyone who has seen it, of the immediate cessation of the threatening signs in our helpless patients.

Still I must impress upon you other means of relief than the trochar and canula. When the stomach becomes distended there is no agent, so far as I have experienced, which is so rapid in its action as creasote administered in conjunction with ether, or the use of naphthol in doses of 25 to 30 grs. Creasote immediately destroys vegetable organisms, and quickly arrests fermentation, charcoal neutralizes the products of putrefaction and causes gastric and intestinal antisepsis. Dilute hydrochloric acid is also valuable in this condition. Before resorting to puncture in intestinal tympany I place great reliance in the intravenous injection of eserine. I never use less than two grains, made in solution immediately before using it, by dissolving it in boiling water and adding a few grains of chloride of sodium. The solutions of eserine which are placed at our disposal are not reliable. Eserine in one or two grain quantities can be procured in hermetically sealed tubes. In a big cart horse I have given three grains, but find as a rule the smaller dose mentioned is sufficient.

Of course I do not wish to imply that there are any medicines which are specifics against intoxication, but looking upon the animal carrying within itself the causes of innumerable diseases there is undoubtedly a fostering condition in perverted nutrition. Animals are not only poisoned when they actually swallow a poison but when they fall victims to certain diseases. Bourchard says "When the poison is produced by some external cause or when it is formed in the system by a perversion of nutritive functions, or by the secretions of a microbe, it must be considered as anomalous either as regards its nature or its quantity. But normal poisons exist. (Applause.)

Discussion.

Capt. Russell opened the debate saying that he was sure they would all congratulate their friend, Mr. Dickinson, upon the able paper he had prepared and the peculiar scientific aspect which he had taken. These ptomaines and toxins and other putrefactive agents were no doubt of very great importance, but they took a lot of pronouncing and required a considerable amount of recollecting. He was perfectly in accord with Mr. Dickinson in his remark that the death of many animals was due to self poisoning. In many cases of animals where the bowels became distended with gases and they died, on making a post-mortem examination they had been at a loss to determine the cause of death. In all these cases of distention of the stomach he found dilute hydrochloric acid almost a specific. In distention of the bowels, carbolic acid or creosote had a good effect, but he should not be satisfied until they had actually punctured the stomach of the horse from outside. He was persuaded from the many post-mortems they made where they found the true stomach distended almost to bursting that if relief could have been given by puncture or by some chemical agent those cases might have been saved.

Mr. J. Mackinder asked if laminitis produced in animals through taking wheat flour was not the effect of self-poisoning. In his district they grew a large quantity of potatoes, and they were often given to horses who got tremendous distention of the stomach. Their worst cases of distention of the stomach and bowels arose from potatoes. They also got diarrhœa, and he asked would eserine be recommended then. He should very much like to have the stomach of the horse punctured, but he thought hardly possible to do it.

Mr. Wragg said he should like to join Captain Russell in congratulating Mr. Dickinson on his able paper. He had heard it with a great deal of interest. He admitted these ptomaines and other similar poisons were a bit deep especially to an old practitioner like himself. Mr. Dickinson spoke of tetanus as the result of a wound and also of another form of tetanus, and he was not quite clear whether he meant to infer that tetanus sometimes took place without any wound—Mr. Dickinson: Yes.—Mr. Wragg said his opinion was the toxic poison entered by some wound or other. The organism of tetanus had been discovered and they knew it was due to a particular poison, and it was pretty conclusive to his mind that it was due to the poison being taken into some wound which they could not see or were unable to find. He remembered once attending a horse belonging to a doctor and he complained of his treatment because he did not cover the wound up, and thought he had been using no antiseptic. He told him the lotion that had been applied was bichloride of mercury and the doctor told him he was afraid of tetanus supervening, and instanced a case he had been attending in which a child had been cut and some of the people pulled down a cobweb and put round this child's finger and tetanus set in. He told the doctor that in that cobweb was the infection of tetanus, in the dirt and dust. In many cases of horses in dust yards that he attended, when a horse's foot had been pricked by a nail tetanus supervened. He thought, without doubt, that this organism of tetanus was in the dirt, and more particularly in the cinder dust. Mr. Dickinson went on to

speak of tympanitis. In the cases of colic they got in London it was very rare they had tympanitis. He did not remember any case in which tympanitis caused death. They did get it badly where there was a twist of the bowel, either large or small. He had never to puncture the abdominal cavity for tympanitis, and he should wait until he heard the result of Captain Russell puncturing the stomach before he tried that. He thought the existence of tympanitis of the stomach was doubtful, and believed it was principally confined to the large intestines. It was true that in a post-mortem they saw tympanitis, but whether that occurred in life or after death, was not easy to prove. When the National Veterinary Association met at Peterboro', he remembered Captain Smith introducing to the notice of the meeting his long enema tube. He had one of those tubes made and continued to use it with great success, and in all cases of colic his instructions were that the tube should be used. In these cases of colic, which is nearly always in the large bowel, the great aim was to produce action of the bowel and they could reach the part by the aid of the long enema tube. It was a nasty job to do, but with a little patience and practice could be introduced about six feet. If they pumped a little warm water in and inflated the bowel, by a little manipulation they could easily get the tube forward. He found he had had in his infirmary 300 cases and only five died, death resulting from twist, rupture or calculi.

Mr. HARTLEY said he should like to add his thanks to Mr. Dickinson for the scientific paper he had given them in his endeavour to throw light on these mysterious ferments. In his practice he had given hypo-sulphate of soda. It was very cheap, and animals would drink it. He had also given a mixture of turpentine, ether and linseed oil, and he had given strychnine and belladonna. He had never given more than one grain of eserine for fear of rupture of the large intestines. He could assure Mr. Wragg that there was very little danger in puncturing the intestines of the horse. He had done so with no more untoward result than the formation of an abscess which might be treated in the ordinary way. In the cow it was a very simple matter. They could puncture the cavities of the horse with impunity, although he sometimes thought they were not so courageous as they should be in these cases. As an antiseptic he had had very good results with lysol, it was not so irritating as carbolic acid. He thought if they could teach the people something more about stable management they would hear less about the development of these mysterious ferments.

Mr. WRAGG related a case of puncturing in hydrothorax in which a "practitioner" was also attending, and this practitioner said "why not tap his horse." He replied "because it won't do any good, the animal is sure to die." The practitioner fetched out a cattle canula and trochar and plunged it into the chest, and when he saw blood on it he said he had got into the lungs, and after death there was the mark in the lung where it had gone.

Mr. HARTLEY said he always impressed it upon his pupils to keep away from the posterior margin of the rib. He cut in between the 10th and 11th rib, and from one animal he took away 39 gallons of fluid.

Mr. JAS. SMITH, who also thanked the essayist for his paper, said he understood him to say that the germs of influenza were present in these young horses when they came up and were developed as a rule by the alteration of temperature when stabled. The difficulty he generally found when young horses were put into stables was catarrh, which was likely to extend to the lungs. He asked Mr. Dickinson whether he meant to refer to the epidemic influenza.

Mr. FREER said he must join the rest in thanking Mr. Dickinson for his paper. A great deal of it was beyond his comprehension, but the first thing that struck him was with regard to the toxin of tetanus. There were idiopathic and traumatic tetanus, and it might be taken, in cases where they might look from head to foot and not find a wound, through hay and forage which had been on the earth and was often eaten by an animal with a wound in its mouth or had taken it through other causes. As to gastro-intestinal derangement he should like to have an opportunity of introducing the canula into the stomach of a horse, which he knew was going to die. He had not tried beta-naphthol nor lysol but he thought the best treatment was turpentine, and if it cost 5s. per ounce everybody would use it. His experience taught him that turpentine was the finest agent they could name for tympanitis or intestinal colic. He instanced a case of puerperal mania in the cow, which he treated and the cow was all right, having suffered from poisoning from some agent. As to puncturing the abdomen he had done so with only the formation of an abscess as Mr. Hartley had said and that could be avoided by acting on Mr. Jas. Simpson's advice in withdrawing the trochar to be careful not to pull away the skin from the abdominal tissues and thus set up inflammatory action.

Mr. DICKINSON, in reply, thanked them for the kind expressions used. As to the cases of laminitis from wheat, if they got poison into the system it did not matter much what it was from. As to Mr. Smith's remarks about influenza there was no doubt they walked about with the poison in them. He had seen horses brought from grass into a stable and catch influenza, and others had been brought up and the temperature graduated and they had caught influenza. He believed that gastric distention was more easily removed by medicine than tympanitis of the intestines. They sometimes had great dilation of the stomach in the horse, and he had seen horses lie on their stomachs and use pressure to cause them to eructate. He thought they would see the time when the horse's stomach would be punctured, and he suggested opening of the œsophagus as a means of relief. He cited a case in the human subject of a simple fracture of the tibia, where tetanus suddenly set in, and death took place. He had never seen any abscess from punctured colon, and the reason was he thought because he always washed his instruments with an antiseptic.

SOME INTERESTING CASES.

Mr. JAMES SMITH said that when requested by the Secretary to contribute a short paper for the meeting he pointed out that this was not his turn, but that he would as usual do his best. Bearing in mind the success which the relation of interesting cases had met with at the meetings of other veterinary medical societies, he came to the conclusion that a few rough notes might not only prove acceptable but also be the means of creating a discussion by which they all might derive benefit. In the first case he was called to see a cow which was down and could not get up. She was due to calve in three weeks and exhibited every symptom of milk fever. She was unconscious for thirty hours but got better and calved at her proper time.

Case No. II. was a mare which was unwell and swelling behind, she having slipped a foal four days before. The foal was dead but appeared healthy and had only been dead a short time. On examination he found the feet of another foal, which when he got it out had been dead some six weeks. The mare made a good recovery and is in foal again.

A two-year-old cart filly purchased the day before in a fair on a fearfully hot day, presented the following symptoms next morning. It was standing dull and listless in a loose-box with head depressed, mucous membrane slightly injected, pulse 60 and full, and temperature 104. On attempting to move the filly stumbled and

reeled and sank on to her knees and pressed her head on the straw. This went on for a week and then the severe symptoms began to disappear, but the filly never had complete control of her actions. The treatment consisted of cathartic ball, cold water to head, blister behind the poll, and bromide and iodide of potass. in the food. He suggested this as a case of sunstroke.

Having referred to an epidemic of strangles in this district in which varying symptoms presented themselves, Mr. Smith invited discussion in the cases he had described.

Captain RUSSELL agreed that cases like these were likely to prove of interest to the members of this Society. He remembered a case in which a cow suffered from every symptom of parturient apoplexy six weeks before she calved. A sow pig had two pigs and went a month and had nine more from a second hogging, and brought them up. There was no doubt the filly referred to suffered from sunstroke. He had seen horses drop in the streets in Calcutta, but he had never seen a horse in a stable suffering from sunstroke. He agreed as to differing symptoms in certain diseases, and said as to influenza some horses would have an abscess in the submaxillary and others had no abscess, but why the difference he was not prepared to tell.

Mr. FREER said ante-partum paralysis reminded him of a case of a cow so affected, which was said to be about calving and they turned out to be twins. There was often fever but no sub-maxillary abscesses in the cases to which reference was made. He remembered attending a stable of horses in a similar condition and about two months after a young mare was found reeling about and showing evidence of brain disturbance, and the post-mortem showed a cerebral abscess.

Mr. PORTER-SMITH cited a case which he diagnosed as tubercular meningitis, and Prof. McFadyean found the brain crammed full of tubercular bacilli.

Mr. J. MACKINDER said he had attended a cow in a similar condition to those described after having calved ten weeks.

Mr. ROBINSON proposed a vote of thanks to both Mr. Dickinson and Mr. Smith for their interesting papers. They were very much obliged to Mr. Dickinson for his scientific address, and the most interesting part to him of Mr. Smith's paper was that of milk fever. There was no doubt milk fever was due to a toxic poisoning in the system, such as was also produced by indigestion, but cases six weeks before or ten weeks after calving were not he held pure cases of milk fever, but cases of indigestion or septic poisoning in the animal system owing to non-excretion. This produced a sedative effect of the same character as the true poison of milk fever.

Mr. HARTLEY seconded the votes of thanks, which were carried unanimously.

NEW MEMBERS.

Mr. H. BENTLEY EVE, of Caistor, Mr. A. J. SELLERS, of Market Deeping, and Mr. W. A. ALLOTT, of Upwell, were elected members of the Society.

Captain RUSSELL proposed, and Mr. Brooks seconded, a cordial vote of thanks to Mr. Rudkin for his conduct in the chair, and the members present then adjourned to dinner, after which the usual toasts were duly honoured, concluding the meeting.

J. A. ROBINSON, *Hon. Sec.*

ROYAL VETERINARY COLLEGE, V.M.A.

The 232nd general meeting of the Society was held in the New Theatre of the College, on Friday, November 20th, at 6.30 p.m. Mr. Stephens was in the chair. There were present Mr. Berry, M.R.C.V.S., and 76 members.

Mr. HARBER read a paper on "Shoeing." A discussion ensued which was opened by Mr. Perry, and the following gentlemen took part in it: Messrs. Berry, Wood, Hall, Hudson, Kitchin, Watt, Amos, Young, Mulvey, Goodall, Bell, Miller and Chellew.

Votes of thanks to the Essayist and Chairman terminated the proceedings.

F. CROWHURST, *Assist. Sec.*

EXTRACTS AND NOTES.

BACTERIOLOGY FOR MEDICAL GRADUATES.

Those veterinarians who think we should only move as imitators of the medical profession will be glad to see that in one important point we are some years ahead and that it now proposes to imitate us.

"An adjourned comitia of the College was held on Friday, November 6th, Dr. S. Wilks, F.R.S., President, in the chair, when the consideration of the following motion by Dr. Pavy was resumed, namely:

"That a committee should be appointed to consider and report on the desirability of including the subject of bacteriology in the course of study and examination for the licence of the College."

The PRESIDENT said it was evident from what had passed at the last meeting that this was a matter which must be discussed in detail in the College. They wanted to know a little more of the necessity for the change and how far it would affect the curriculum. If the matter were referred to a committee that committee ought to be supreme, and could reject the proposal if it saw fit; they could not give instructions to the committee.

Sir W. ROBERTS said that the chief argument against the proposal was that this would increase the burdens of the student. With that view he sympathised; it would not be judicious to add to the labours of the student, nor would it tend to make him a better practitioner. The student of to-day had no greater capacity for acquiring and storing knowledge than the student of fifty years ago had. But on the other hand changes in the curriculum must be made from time to time to keep pace with the advance of science. Bacteriology certainly now loomed largely in pathology, and in ten year's time it might have more importance in clinical medicine. He would therefore support Dr. Pavy, but he would instruct the committee that if they did recommend the inclusion of bacteriology in the curriculum, it must be substituted for some subject already included, but of less importance.

Dr. HERON said that ten years hence bacteriology would occupy a much more important position than now. He could not believe that the College would say that this was a subject which ought not to be included in the curriculum.

The PRESIDENT, in calling upon Dr. Washbourn, asked him especially to direct his remarks to the value that a knowledge of bacteriology would have for the general practitioner.

Dr. WASHBOURN said that the arguments of the opponents of the resolution were of no great importance. He was unwilling to give bacteriology undue importance, and should be sorry if it were divorced from pathology. In the examination in pathology no subjects were mentioned, and therefore it could be included without special mention; but in the courses of study the branches of pathology were specially mentioned, and therefore he thought that bacteriology ought to be included. The practitioner should know something about cultivation, so as to be able to take a specimen for examination; he must also have some knowledge of the meaning and processes of sterilisation, and such knowledge could be given

to the student quite easily. At the Durham University all the students received instruction in practical bacteriology, and no difficulties were met with. He was not prepared at present to say how he wished it introduced into the curriculum.

Dr. NORMAN MOORE, after much experience of the curriculum, was in favour of making changes very seldom; but he thought it might be wiser that the committee should be appointed. Few of them were acquainted with the subject, and fewer still had any experience in teaching it.

Dr. THORNE THORNE, C.B., thought it desirable that the committee should be appointed, but it was by no means necessary that bacteriology should be added to the list. The subject was already absorbed into practical medicine, and he hoped it would not be put in a separate subject.

Sir W. BROADBENT said that the examinations and curriculum were not in the most satisfactory condition possible. He approved of the appointment of this committee, but was impressed with the necessity for a thorough revision of the curriculum, in which the aid of the provincial schools should be sought.

Dr. POORE had been glad to hear Dr. Washbourn say that he did not wish to see bacteriology divorced from pathology. He believed that in every course of lectures on pathology now delivered bacteriology was included.

Dr. ORD was conscious of the importance of bacteriology, and was certain that not only all the lecturers in pathology taught it, but also all the lecturers in medicine. He was opposed to a large change in their requirements for teaching and examinations, and strongly objected to the suggestion that some other subject might be taken out of the curriculum, as that would mean remodelling the whole subject.

Dr. FOWLER saw no objection to referring the matter to a committee, but he hoped the committee would bear in mind that the importance of a subject and of an examination in it were very different things. He had no doubt that the subject would gain in importance as time went on, but he was opposed to making a separate examination in bacteriology.

Dr. BEDDOE had come with the intention of opposing the resolution on the ground that the general practitioner in the country could not possibly have time to carry out the details of bacteriological work, but after the arguments he had heard he was willing to support the resolution.

Dr. PAVY briefly replied, disclaiming any wish to put bacteriology into a position of undue importance.

The resolution was then agreed to *nem. con.*

The PRESIDENT nominated Drs. Pavy, Church, Sir D. Duckworth, Ord, Poore, and Washbourn to form the committee with full power."

WORK AND "INSIGHT."

A very great number of people, scientific people, too, work hard all the days of their lives without making the smallest approach to a discovery. Whatever may be the truth, it is not the case that the amount of discovery is in any ratio to the amount of work expended. Indeed, in one sense, most of the great discoveries in the history of the world have been of a flukey character. That is to say, they have been made when something else was being worked for. Columbus was hoping to find a westward way to China when he stumbled on America; half of our chemical discoveries were made by men searching for the philosopher's stone or the elixir of life; the law of gravitation, the steam-engine, the Röntgen skiagraphs, and even argon and helium were discoveries of a more or less accidental character. In all the cases quoted the discoverers were investigators who had been patiently working somewhat in the direction of the results they attained, but the point is that they did not set out on the mission which they accomplished and which made them famous. Stanley went from London to the middle of Africa to find Livingstone, and he found him. That is the direct road of discovery. The usual method is that the traveller is bound towards some goal and finds the real treasure in a by-path.

The real faculty which distinguishes discoverers is not so much work as insight. This was beautifully illustrated in the case of argon. Those experiments with nitrogen which Lord Rayleigh was conducting with a view of correcting its atomic weight to the fourth place of decimals were, perhaps, at first somewhat irritating on account of the discrepancies which must have delayed the work. Then came the use of the faculty of insight. This was the gift which raised Lavoiser so far above all his contemporaries; by which Dalton, the plodding meteorologist, figures as the great philosopher of chemistry; which showed to Newton, Copernicus, Paracelsus, Scheele, Cavendish, Herschel, Harvey, Helmholtz, and a host of others meaning and potentialities in what men of duller minds would have passed by unnoticed.—*Chemist and Druggist.*

PROF. McFADYEAN ON TUBERCULOSIS

A well-attended general meeting of the Newcastle Farmers' Club was held on Saturday afternoon, in the Town Hall Buildings, under the chairmanship of Mr. C. Stephenson, for the purpose of hearing a paper on "Tuberculosis," read by Prof. J. McFadyean, principal of the Royal Veterinary College, London. Amongst those present were Sir Donald Smith, High Commissioner for Canada, Mr. J. Cameron Swan, Prof. Solomon, &c.

Prof. McFADYEAN, in his paper, said the modern view of the disease was not that it was spontaneous in those inheriting weakness from their parents, but that it was purely contagious. The essence of it was not the formation of nodules or tubercles, but the invasion of the body by a parasite whose presence irritated the surrounding tissues, and thus determinated the formation of the tubercles. The tubercle bacillus was discovered by Koch, and though too small to be seen by the naked eye, microscopic and laboratory investigations had enabled them to learn that its growth was very slow, even under the most favourable conditions of temperature, and that unless it was kept at 90 deg. Fahr. no growth would take place at all. They drew the conclusion that the germ when voided from the body of a diseased animal would seldom or never find in the outside world the conditions for growth and multiplication, though it might retain its vitality like a seed. The germ affecting one animal was bred in the body of a previously tuberculous animal or man, and in that respect the disease was like glanders or any other contagious disorder. Pointing out that whilst a healthy animal might receive the germs by actual contact with another, he said the commonest method of transference was indirect, the tubercle bacilli being voided on the floor or walls of buildings, and afterwards affecting the healthy animals when dry and floating in the air. On grass there was less danger, for the greater space cattle had the less certainty was there of the germs entering a healthy animal's body, whilst another point was that although the tubercle bacilli retained vitality in the dark they soon perished when exposed to sunlight. This explained why the greater proportion of tuberculosis was found amongst the highly pampered animals, those stalled all the year round, and those in badly ventilated premises, and the

comparative exemption of those kept out of doors. As to the susceptibility of one breed compared with another, the speaker said that probably this did vary, though in this country circumstances seldom furnished a fair test. The disease seemed commoner amongst shorthorns, Jerseys, and Ayrshires, than Herefords, Galloways, and Highlanders, and his own view was that no matter the breed the disease would not start in a herd without the introduction of the bacilli, usually in the body of an animal already affected. Dealing with the question of heredity, he said that a few years ago it was held that in a considerable proportion of cases calves were really tuberculous before they were born, and that this was the chief way in which the disease was spread. An impartial review of the evidence had compelled a great many of them to abandon that belief, for investigation showed that tuberculosis in a new-born calf was one of the rarest of pathological curiosities. The evidence was that tubercle bacilli were exceedingly rare in new-born calves, rare in yearlings, less rare in two-year-olds, and common in adult cattle. Alluding to the identity of tuberculosis with consumption he said that when this was discovered a degree of apprehension bordering on a panic prevailed, and it was thought by some medical men that one of the main sources of consumption had been laid bare. But whilst the visibly diseased parts of cattle were always dangerous as food, it was only in rare cases that the edible portions of the carcase contained germs, and though the animal from which they were taken had been attacked by the disease, he pointed out that they were quite safe for consumption. That was fortunate, for had it been necessary in the interests of public health to absolutely slaughter every tuberculous animal and pay compensation, their difficulties would have been materially increased. The interest of the question to agriculturists was obvious, for apart from the identity of the disease with consumption in man, it was widespread, and if left unopposed was capable of inflicting serious financial loss. The public were doubly interested, as it cut off annually large numbers of cattle—how many they did not know—and this must tend to raise the price of beef. But the interest of the public was mainly in the fact that the disease was communicable to them. Considering the risks to which the public were exposed, he said there were good grounds for believing that milk was only dangerous when the udder itself was dangerous, and it was only in a small percentage of cases that this became infected. Tuberculosis of the udder was a condition easily detected. This suggested that a periodical inspection—not less than twice a month—of all milch cows by competent veterinary inspectors would go a long way to protect the public. Still this would cost half a million of money, and would not entirely remove the danger. A less expensive, but, unfortunately, less efficient safeguard would be to make notification of udder disease compulsory, and the sale of milk illegal. This, coupled with regular inspection, would lessen the danger. Neither would guarantee public safety. Still every person could obtain this guarantee without Government assistance, by boiling or steaming the milk. In reference to meat, it had been gravely asserted that human consumption frequently came from the butcher's stall. But the expectation that human consumption would be reduced by stamping out bovine tuberculosis was not entertained by any pathologist of repute. Almost every one so many times in a year consumed beef that came from an animal that was tuberculous in some respect. That had no terrors for him, for as he had stated the edible portions only contained germs in rare cases. It was true that thorough cooking would rob the meat of its dangers, but they were not going to concede to the butcher the right to unrestricted traffic in tuberculous meat. The only way to prevent this was to abolish private slaughter houses, to institute public abattoirs, and meat inspection by skilled officials. Hear, hear.) Such a system was wanted for the prevention of diseases other than tuberculosis, and was bound to come before long. After refering to the valuable aid tuberculin gave in diagnosing the disease, he described the French proposals for rendering notification compulsory, slaughtering the obviously infected animals, testing those suspected and slaughtering those which reacted, and giving partial compensation. This, it was believed, would cost £50,000, the estimate being that one per cent of the cattle were affected. In this country the proportion could hardly be reckoned at less than five times that. If the Government were prepared to spend £200,000 for carcases seized, then the plan was practicable for Great Britain, and would soon make tuberculosis a rare disease among cattle. He questioned whether the question of compensation alone could settle the matter, and held little hopes of the Board of Agriculture being able to do anything at present. Meanwhile, he said the man with tuberculosis in his herd could do much for himself. If he continued to lose animals year after year, he was much to blame; for any veterinary surgeon up to the times could tell in twenty-four hours with tuberculin which of them were already infected. If some of them were really ill, or wasted, the best thing was to poleaxe and bury them. It was seldom, however, this would make a drain on the pocket. Most of the animals that reacted appeared to be healthy. They must be separated from the rest and made ready for the butcher as soon as possible. The most convenient time to tackle the disease was the spring, for then the animals reacting could be fattened out of doors without danger to the others. The premises must be disinfected; the ventilation made good. Having once got his stock free the farmer must try to keep it so by not introducing any animal which did not come satisfactorily through the tuberculin test. (Applause.)

Questions and discussion followed.

The CHAIRMAN said he could not go so far with Professor McFadyean as to say that tuberculosis was a purely contagious disease. He was certain in some cases it was congenital, and had good reason to believe it was sometimes hereditary, and the calves of infected parents certainly inherited weakened tissues. He quite agreed that where tuberculosis was only in the bowels and such like the carcase was fit for food. He spoke in favour of abattoirs, but said if they had to submit to restrictions and examinations of their own cattle, the imported dead meat should be examined with as much stringency. (Hear, hear, and applause.) He held that a respectable butcher who bought for a good price in any market in England an apparently healthy animal, and afterwards found it bad, should be compensated. (Hear, hear.) As a breeder he would strongly advise them not to breed from tuberculous cattle.

Prof. MCFADYEAN replying, said tuberculin was not only reliable but absolutely devoid of danger. As to heredity, only 40 indubitable cases of tuberculous newborn calves were recorded in Europe. There was no relation between human consumption and tuberculosis, and in 999 cases out of 1000 human consumption came from human beings. He agreed with the inspection of foreign meat, and the compensation of butchers under the *bona fide* circumstances cited by the chairman. In answer to Mr. Wilkinson, he said the disease was commoner in dairy cattle than those kept in the open.

Mr. ELPHICK said that within the last few days he had inoculated a herd with tuberculin. A few weeks before the cow that stood No. 9 in the byre was destroyed in an advanced stage of tuberculosis. After the test was applied to the rest, No. 10, 11, and 12 reacted. The air way in the byre ran from the direction of No. 9 to No. 12.

SIR DONALD SMITH, on the invitation of the chairman, afterwards addressed the meeting. It was with very great regret, he said, Canadian farmers found that within the last year they were not able to send their live cattle into England and Scotland to be fattened there, and give a

profit in the first instance to those on the other side of the Atlantic, and then to the British farmer. It was the opinion, however, of the best farmers and citizens of Canada that the gentlemen who advised the Government to act as they did acted in the best of good faith. (Hear, hear.) Men of equal good faith, he pointed out, believed the course taken was wrong. He expressed the hope that the Canadians would adapt themselves to the altered conditions, and by means of the cold storage system be able to send dead cattle to this country on equally advantageous terms to themselves and in very large quantities.—*Newcastle Daily Leader.*

Swine Fever Tax (?)

The Central Chambers of Agriculture have adopted a report presented by the Cattle Diseases Committee, which states that in the financial year ending 1895-96 the Local Government Board were required to make good a deficiency in the cattle pleuro-pneumonia account, and accordingly, under certificates, made by the Board of Agriculture, a total sum of £145,200 was paid out of the local taxation account, and thus, indirectly, out of the rates. As the Committee have always strenuously insisted that the expenses incurred in stamping out disease among stock should be defrayed from the Imperial Exchequer—a principle which was distinctly recognised by Parliament in the Pleuro-Pneumonia and Swine Fever Acts—they protest against the continuance of this draft upon ratepayers' money. The provision that any deficiency in the amount provided by Parliament should be made good out of the Local Taxation Account was, obviously, intended to meet an emergency, and was not intended to authorise a yearly call upon the Local Taxation Account exceeding the amount paid out of the Exchequer. In the opinion of the committee application should be made to Parliament for a further vote of money. —*County Gentleman.*

The "Minerva" Nailess Horse Shoe.

The old idea of a nailless shoe is to the fore again, and a company in course of formation for working this patent in Great Britain and the Colonies. It is stated that "the Authorities of a German Army Corps, after a trial extending over 12 months, have given a repeat order for a large quantity" and that "Dr. B. Peter, of Berlin, speaks in terms of unqualified admiration of the invention." The shoe, very similar to the ordinary pattern, is held to the foot by clips of which the forked lower ends pass through oblong slots (like elongated nail holes tapering at the ends), and are secured by "wedges" driven up between the fork. The upper end has rather wide horizontal "grip," partly grooved and partly driven into the wall a little above the shoe, and the part from this grip down to the shoe is let into the wall enough to meet the slot in the shoe. The shoe does not project beyond the hoof. When we have seen the system in use we may offer a definite opinion as to its value, but we have the impression that the German veterinarian shines in laboratory work rather than in questions of practical management.

Foreign Office and the Rinderpest.

Nature says, "Nothing could better show the vast difference which exists between the British and German Governments in relation of all questions of science. We were informed sometime ago, by one upon whom implicit reliance can be placed, that some years ago, long before the devastating rinderpest crossed the Zambesi, the Foreign Office was warned of its serious nature, and it was pointed out at the same time that the proper step to be taken was to send out a competent man to investigate it, in order that some means might be found to stop it. The Foreign Office declined to take any action in the matter."

The Lay of the Permanent Official.

Oh, he comes up proud,
This god of the crowd,
This Cabinet Minister callow,
And he takes command
In a manner grand,
But his mind is a field that is fallow.

And I train this man
On a perfect plan,
And his business he learns by snatches;
And we always hold
By this rule of gold
That I write, and he signs, the despatches.

'Tis a task of weight
To keep matters straight,
For his order curt and concise is,
And he likes to feel
His hand at the wheel
When there looms in the distance a crisis.

And there comes a day
When he has his way,
And I see and in silence deplore it,
(For 'tis etiquette
With me and my set,
If the man's a fool, to ignore it).

Westminster Gazette.

These verses have a general application, but two years ago we should have thought they were specially directed.—Ed.

ARMY VETERINARY DEPARTMENT.

Veterinary-Capt. R. Moore arrived from South Africa 20th inst. and is posted to Aldershot for duty with the Royal Engineers.

Vet.-Lieut. W. D. Smith arrived from Egypt, 23rd inst., on three months leave of absence.

OBITUARY.

Hugh Ross, M.R.C.V.S., Inverness, N.B.
Graduated, Glasgow, May 29th, 1889.

We learn that Mr. Ross died on the 10th inst.

Nicholas Vasey, M.R.C.V.S., Troy, N.Y., U.S.A.
Edin., December 20th, 1872.

The death is announced of Dr. Nicholas Vasey, veterinary surgeon, of Troy Town, New York, U.S.A., eldest son of the late George Vasey, of Bradbury. Dr. Vasey, who was 66 years of age, was a well-known and highly respected citizen of Troy. He was born at Helme Park, near Bishop Auckland, and took a course at Edinburgh Veterinary College, afterwards graduating with a diploma as a member of the Royal College of Veterinary Surgeons, London. Mr. Vasey practised for some time in Darlington, and was a member of the Methodist body worshipping at Paradise Chapel. He had been a resident in Troy for 19 years. The deceased gentleman leaves a widow and two daughters.—*The North Star.*

CORRESPONDENCE.

PHYSIOLOGY OF LOCOMOTION.

SIR,

When my note upon the above subject was written I was under the impression members of the profession would feel anxious to give expression to their views. It appears that one of two reasons causes their silence. Either the subject is well known or there is considerable indifference on their part. Irish gentlemen seem to take great interest in the question, judging from letters received. One "Fellow" of 13 years standing, informs me he had spent much time and money in trying to gain knowledge of the subject and failed. Another expresses himself in a similar way. Every correspondent has been replied to. If my condition had been carried out I should have written fully upon the subject as suggested, but as there appears to be so much lukewarmness on the part of members of the profession, and they are content to know that the four legs of a horse are used, they will not trouble themselves about it. I don't conceive it creditable to the profession.—Yours truly,

R. H. DYER.

Limerick, 16th November.

[Mr. Dyer misjudges his profession. They would be pleased to have information.—ED.

RE ADVERTISING.

SIR,

Enclosed you will find a copy of *The Paisley Daily Express* in which is an essay on "Experience and Experiments with Milk Fever in Cattle" by the County Inspector.

In *The Record* some time ago there were several letters *re* advertising. Is this not advertising with a vengence? What has the veterinary profession come to? A science of mystery!!—Yours truly,

A RENFREWSHIRE V.S.

16th November, 1896.

[Space prevents our quoting this address in full. It was delivered at an agricultural dinner which possibly is some excuse. We hope the audience appreciated the transparent philanthrophy of the speaker; we are sure the profession will his science.—ED.

"Mr. Pottie then addressed the members on 'Experience and Experiments with Milk Fever in Cattle.' He gave his own experience of the disease, and related some of the experiments he had made. It had been the object of every veterinary surgeon to discover the first symptoms of the disease; but these were seldom observed. After dealing with the various symptoms of the disease, the speaker said that what his theory with regard to the disease led him to as the best preventive was to keep the first and second stomachs comparatively empty, and they would do more good in the way of preventing this disease than all the methods he knew. He mentioned different ways of treating the disease, and warned them from the very first to give the animal nothing but water with a small handful of hay or straw. He had long had in view a method whereby some of those fatal cases that occurred when cows were at grass might be remedied; but the difficulties were great. It consisted in emptying the stomach by pumping off the food. Medicine, he said, was of no use when, perhaps, 1½ cwt. of fermenting grass was lying in the stomach. For five years he had endeavoured to construct a pump to accomplish this purpose; but when he stated that the contents of the stomach were more like a substance which a graip could best work in, they could readily understand the difficulties in the way of a pump acting. But he was almost confident that by next spring he would have his object accomplished. This was not the first mysterious work performed by him, for when studying the question of milk production and the proper temperature of a byre in winter, his attention had been engaged for three years with the subject before he found out all the facts connected with it. But what of that when it gave the farmer £30 to £40 more in the season by attending to it. Again, the facts connected with abortion had engaged his attention for over four years, and now as a result he could undertake to stop the process of infection in abortion in any stock to the great advantage of graziers. Yet another subject he had not made publicly known had engaged his attention for over two years—that was how to make a cow prove in calf. Vast sums of money were lost annually because breeders were obliged to fatten such animals. He had now discovered a process by which a great number of such animals might be made to produce fine healthy calves. As they extended those discoveries, they not only benefitted themselves, but all around them, and widened their sphere of usefulness as members of a profession existing for the benefit of the breeders and farmers." (Applause.)—*Paisley Daily Express.*

TECHNICAL LECTURES.

SIR,

Has the Editor yielded to the restful spirit of the times? If so he must have been aroused from his reverie, a week ago, by the communication of a "Poor Graduate" shewing that though London may continue as in the past to be of an antedeluvian turn of mind, that Edinburgh, now as ever, and in true keeping with her instincts, means to progress in the future as she has done in the past. But Edinburgh even must now look to her laurels if she wishes to retain them, and if she is not to be relegated to a back seat. Dundee has now got her University College, her Technical Institute and her Coachman's Club, the fifth annual course of veterinary lectures at which being as follows:—

DUNDEE AND DISTRICT COACHMAN'S CLUB.
94 NETHERGATE.

SYLLABUS

OF

FIFTH COURSE OF LECTURES,

IN CONNECTION WITH THE HORSE,

To be Delivered within the Club Rooms.

FIRST LECTURE.

Saturday, November 7th. By Mr. J. M'Lauchlan Young, M.R.C.V.S. Subject—The Symptoms of some Diseases.

SECOND LECTURE.

Saturday, November 21st. By Mr. James Peddie, F.R.C.V.S. Subject—The Digestive Systems of the Horse.

THIRD LECTURE.

Monday, December 7th. By Professor E. Waymouth Reid, B.A.M.B. Subject—How and why we breathe, to be illustrated by experiments and diagrams.

FOURTH LECTURE.

Saturday, December 19th. By A. F. Durkie, Esq., M.R.C.V.S. Subject—Feeding Stuffs for the Horse.

FIFTH LECTURE.

Monday, February 1st. By Mr. James Peddie, F.R.C.V.S. Subject—The Circulation of the Blood.

SIXTH LECTURE.

Saturday, February 20th. By Mr. J. M'Lauchlan Young, M.R.C.V.S. Subject—The Structure of the Horse's Foot.

Lectures to commence each evening at 8.30 prompt. Full attendance of Members expected. All interested friends cordially invited.

ROBERT REID, *Secy.*
ASHLUDIE, 16th Oct., 1896.

Besides all this Aberdeen University has now got her veterinary lecturer, and the County Councils of Aberdeen, Forfar, Perth, and Fife have, one and all, for years past had their annual courses of veterinary lectures in all the more central suitable parish schools.

In these circumstances I was about to exclaim, what of the veterinary profession? but the veterinary profession be d——d! what of it? Is it worthy of even one moment's consideration? Has it not brought all this down upon itself? For the sake of notoriety, self-advertisement, and a few petty pounds per annum these *able, enthusiastic, distinguished* members sell their profession for a mess of pottage, devoting themselves to the creation and training of a new generation of quacks, and the profession so far as they are concerned may forsooth go to Hades.

But what of the diligent students who have year by year attended, and who will soon have completed the fifth annual course of instruction, what of them? What certificate, badge of distinction, or qualification are they to get? Certainly something of the kind must soon be forthcoming, especially if teaching of this kind is to go on continuously. The certificates of "good" or "very good" as proposed to be given to the Edinburgh Herriott-Watt graduates do not at all appear to meet the wants of the situation, a certificate that its possessor "is capable of doing without veterinary help, advice, or assistance," would not only be much more acceptable to the possessor of it, but would be likely to be much more useful and valuable to him, as it would be much more highly valued and be more acceptable with the public, a very large proportion of whom do not pause for a moment to consider the value of the qualification, but accept of it at once and in good faith, more especially if there be a prospect that in doing so the saving of a little money is to be effected. That such should be the nature of the certificates to be given to "farmers, ploughmen, coachmen, grooms, carters, stable managers, shoeing smiths, and others interested in the care of animals" who may graduate at these institutions, I am the more fully convinced when I reflect upon the fact that one of the present students at a class well known to me has had charge of a stud of about ten horses for close upon thirty years, and has during that time, to my knowledge, only twice required veterinary aid.

If therefore these certificates be given as they ought to be, to the effect that their possessors "require no veterinary help" or "are capable of doing without veterinary aid" see what an immediate and important advance would be made, and by the way, what a bewildering blow would be dealt to the veterinary profession. All that will be wanted of the profession in the near future will be to provide a few lecturers, not more than one for each county. Ah! what a prospect this will be for the various highly equipped fully manned veterinary schools to contemplate!!

Trusting that the foregoing mental exercises will not occupy too much of your space when committed to type, and that they will arouse you, Mr. Editor, to a lively sense of the danger of the situation so far as we as a profession are concerned, and to the tendency of the spirit of the times in which we live, as well as enable you to acquit yourself like a man in dealing with this rapidly becoming *most urgent question of the day.*

ANOTHER POOR GRADUATE.

THE WARRINGTON CRUELTY CASE.

SIR,

I have this moment come on duty from a sick room, where I have been confined nearly three weeks, and my attention has been called to a report printed in your *Record*, quoted from *The Warrington Guardian* of the hearing of an information laid by Bilson against Morris for cruelty to a horse.

As soon as the facts revealed at the hearing were reported to me in my sick room I gave instructions for enquiry to be made, and a day or two later that Bilson should be dismissed from the service.

I am sure you will do me the favour of making this fact known to your readers, either by the publication of this letter in the edition of your journal which will be published to-morrow, or in a note of half a dozen lines from yourself.—I am, yours faithfully,

JNO. COLAM, *Secretary.*
Rl. Socy. for the Prevention of Cruelty to Animals,
105, Jermyn Street, St. James's, London, S.W.
November 20.

"TESTIMONIALS."

A correspondent wishes to know whether the Council approve of the following, or whether it will take some action to prevent such exhibitions of bad taste:—

From J. VINCENT BROWNE, Esq., M.R.C.V.S. F.V.M.C.A.

Pietermaritzburg, Natal, 2nd Feb. 1893

"'Bovicura' is the finest sample of Cattle Medicine ever yet introduced to my notice. It is most skilfully prepared, the ingredients being of the best and purest kind, seldom to be found in preparations designated for the treatment of domesticated animals."

From FREDERICK ADSETTS, Esq., M.R.C.V.S., F.V.M.C.A

London, 24th March, 1894.

GENTLEMEN,—"I have much pleasure in testifying as to the efficacy and success of 'Bovicura' in many of the ailments of the horse and other domesticated animals. Its use and effects have been my personal observation for a considerable number of years."

From THOMAS BATY, Esq., M.R.C.V.S., L. & G.

Cleethorpes, Lincs., 23rd Jan. 1893.

DEAR SIRS,—"The best Veterinary Preparation ever introduced to my notice. Free from any deleterious or obnoxious matter. For the lambing season I consider 'Bovicura' invaluable to flockmasters."

PROFESSIONAL CONDUCT.

SIR,

Perhaps you might be good enough, Mr. Editor, to give your opinion as to whether or not the following conduct on the part of a M.R.C.V.S. comes under the heading of "disgracefully conduct" and if so should I report it to the committee in charge of the misdemeanours on the part of our members.

A wealthy client of mine had the misfortune to have one of his horse's backs chafed or grazed by the riding saddle. The horse in question is always ridden by a lady—my client's wife. I was called in attendance and amongst other things I ordered the saddle to be taken

to the saddlers to have it altered. The saddler who was called upon to make the alteration is rather intimate with my opponent, and when he (the harness maker) went to fit on the saddle my opponent accompanied him, knowing full well that I was "physician-in-ordinary" in attendance although he (my opponent) informed my client that he was unaware of the fact when my client enlightened him on the subject.

Suffice it to say that the "ruse" with the noble pair did not take, as I still enjoy the full confidence and respect of the client in question. Meanwhile, I am yours in anticipation,

M.R.C.V.S.

We must decline to express an opinion until the other practitioner offers his explanation. Doubtless he will not remain under this accusation without protest.—Ed.

Communications, Books, and Papers Received—Messrs. W. Shipley, Senior, G. A. Banham, M. Hedley, H. Dawes, J. A. Robinson.

Newcastle Daily Leader, *The Norfolk Chronicle*, *The Alfreton and Belper Journal*.

Veterinary Societies—Addresses.

Alterations for this list must be duly notified by the Secretaries

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93 Huddlestone-rd. Tufnell Park, N.
Meetings, First Thursday in each month, except August and September, 10 Red Lion Square. Holborn, at 7 p.m.

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Meetings, Second Tuesday, Feb. and July

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116 Stephens-green-west, Dublin

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Second Tuesday in August, November.

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Treas: Mr. F. W. Wragg, F.R.C.V.S., Whitechapel, London.
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Hon. Sec; Mr. Frank Somers, M.R.C.V.S., 4 Wade Lane, Leeds
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